

Tailgate/Toolbox Topics



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Servicing, Single, Split Rim & Multi-piece Rims or Wheels

An average-size truck tire, when fully inflated, exerts a force of more than 40,000 pounds against the rim flange. Failure of tire/wheel components can result in an explosive pressure release. Locking rings or other components may be propelled at speeds up to 130 miles per hour. Anyone nearby could be killed or seriously injured.

Most accidents occur during tire inflation, usually because of over-inflation or improper procedure, or because of improperly seated, mismatched or damaged tire/wheel components.

Mounting and Inflation

1. Pre-inspect for properly matched components, damaged components or corrosion. Lubricate beads and rim surfaces. Assemble the tire and wheel.
2. Use a clip-on chuck with at least 24" of hose between the chuck and an inline gauge and valve or properly pre-set regulator. Inflate to no more than 3 psig to seat beads and lock rings.
3. Use a cage or restraining device for inflation of tires on multi-piece wheels, and for inflation of tires on single-piece wheels that can't be restrained on a hold-down cone-type tire inflation system. Check for properly seated components before removing the mounted tire from the restraining device.

Other Considerations

4. Do not weld or apply heat to rim components of inflated or partially inflated tires. Do not mount tires to rim components that have not cooled to ambient temperature.
5. Under-inflated tires on multi-piece or split rim wheels may be re-inflated while the wheel is on the vehicle only when pressure has not dropped below 80% of the recommended pressure.
6. Stand clear of the potential trajectory path during inflation.

Training

Employers must make certain that employees understand, demonstrate and maintain the ability to safely service single, split and multi-piece wheels.

Required Charts and Manuals

- ♦ A current split and multi-piece rim or wheel matching chart
- ♦ A typical rim contours and marking location chart
- ♦ A current rim manual containing instructions for proper tools recommended for the type of rim or wheel being serviced

Discussion Questions

- ♦ How does using a clip-on chuck and 24" hose extension help you stay clear of the potential trajectory path?
- ♦ Where would you look for rim markings?
- ♦ Where are the charts and rim manual located?

Resources

General Industry Safety Orders:

Title 8, California Code of Regulations, Section [3325](#) Tire Inflation Equipment

Title 8, California Code of Regulations, Section [3326](#) Servicing Single, Split and Multi-piece Rims or Wheels